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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/751,473	01/06/2004	Brian M. Tierney	033869-001	2339
21839	7590	06/05/2006	EXAMINER	
BUCHANAN INGERSOLL PC (INCLUDING BURNS, DOANE, SWECKER & MATHIS) POST OFFICE BOX 1404 ALEXANDRIA, VA 22313-1404			HOANG, TU BA	
			ART UNIT	PAPER NUMBER
			2832	

DATE MAILED: 06/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Handwritten initials: Hn

<b>Office Action Summary</b>	<b>Application No.</b> 10/751,473	<b>Applicant(s)</b> TIERNEY ET AL.	
	<b>Examiner</b> Tu Ba Hoang	<b>Art Unit</b> 2832	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 March 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3,7-9 and 12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,7-9 and 12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 17, 2006 has been entered.

***Claim Objections***

Claims 1-3, 7-9, and 12 are objected to because of the following informalities: In claim 1, the phrase "a first and second lead wire" recited at line 2 should be changed to "a first lead wire and a second lead wire" or "first and second lead wires". Appropriate correction is required.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 7-9, and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Sakich (5,043,838) cited in the previous Office Action. Sakich discloses the claimed invention at Figs. 1-2, including a resistor apparatus comprising first and

second lead wires 90 and 98, a resistor body or assembly 52 separate from the lead wires 90,98, the resistor body or assembly 52 comprises a resistor core including components 60,62 enclosed within a gas impermeable insulative layer or film barrier 110, the first and second lead wires 90,98 each being electrically attached to the respective first and second ends of the resistor core by terminal assemblies 72 and 84 (as shown in Figure 2), a flexible gas permeable substantially tubular containment casing or assembly 64,128,130 (as shown in Figures 1 and 3, column 5, lines 66-67) formed of a woven material 64 (i.e., filament winding, column 4, line 6) and substantially enclosing the resistor body as shown in Figures 1 and 3 and having sufficient tensile strength and temperature resistance to contain broken pieces of the resistor body in case of overheated while permitting the escape of gas thereby avoiding a substantial pressure build-up within the casing (i.e., where top of col. 6 indicates that gas can pass through the casing. The layer 110 is gas impermeable where it is plastic. Or note that the housing 58 is impermeable at col. 6, lines 10-30 at least along its length). In claims 2 and 3, the casing is woven fiberglass where it is noted as a fiber glass filament or fiber at col. 5, lines 15-25. For claims 7-8, the temperature resistance is understood to mean the device can resist those temperatures, and the device can resist any temperature where resist means it takes time to get to that temperature. Also, resistors get very hot so that the device can withstand that temperature. In claim 9, the fasteners are the bolts 99. Note that the lead wires 90,98 are very thick wires or studs which deliver current. In claim 12, the insulating layer is directly against the core.

**REMARK**

In response to applicants' argument that Sakich does not disclose a first lead wire being electrically attached to a first end of the resistor core and the second lead wire being electrically attached to a second end of the resistor core and in contrast, there are two electrical bodies 60 and 62 wherein a lead wire is attached to one of the ends of each body or does not make mention of a resistor body comprising a resistor core enclosed within a gas impermeable insulative layer. The examiner disagrees as for the reason described in the rejection above that Sakich does in fact teach the first and second lead wires, each being electrically attached to the respective end of the core body of the resistor assembly 52. It is noted that such "electrically attached" does not preclude the wire is directly attached or connected thereto and in Sakich the lead wires are electrically attached to the respective end by or through the terminal assembly 72 or 84. Furthermore since the recitation of "the resistor body **comprising** a resistor core...." in claim 1 does not exclude the resistor core to be a single unitary body or a series of bodies and the Examiner position is that the resistor body taught in Sakich is identified as the resistor assembly 52 as a whole which including a core formed of bodies or components 60,62.

Applicants further argued that Sakich failed to disclose a flexible gas permeable substantially tubular containment casing formed of a woven material and substantially enclosing the resistor body and having sufficient tensile strength and temperature resistant to contain broken pieces of overheated resistor body while permitting the escape of gas thereby avoiding substantial pressure build-up within the casing and in

contrast, an additional structure, i.e., the watershed housing 58 of Sakich is needed to perform the recited function, but not the winding 64 which the Examiner equated to the claimed flexible gas permeable containment casing and there is no evidence that the winding 64 has sufficient tensile strength and temperature resistance to contain broken species. Upon further consideration, the Examiner disagreed as for the reason set forth in the above rejection, Sakich shows the flexible gas permeable substantially tubular containment casing as now equated as the assembly 64,128,130 (as shown in Figures 1 and 3, column 5, lines 66-67) formed of a woven material 64 (i.e., filament winding, column 4, line 6) and substantially enclosing the resistor body as shown in Figures 1 and 3 and having sufficient tensile strength and temperature resistance while permitting the escape of gas thereby avoiding a substantial pressure build-up within the casing (i.e., where top of col. 6 indicates that gas can pass through the casing. The layer 110 is gas impermeable where it is plastic. Or note that the housing 58 is impermeable at col. 6, lines 10-30 at least along its length). Since the assembly 64,8,130 of Sakich has substantially all limitations as the recited casing, the assembly of Sakich must be capable of providing the same function such as to contain broken pieces of the resistor body in case of overheated if there are any. Sakich also shows the casing is woven fiberglass where it is noted as a fiber glass filament at col. 5, lines 15-25.

With regard to the rejection of the claim over Raudabaugh, the Examiner agreed with applicants' argument and such rejection has been withdrawn.

All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the

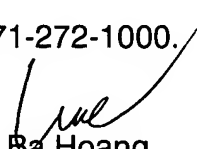
grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing of a request for continued examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tu Ba Hoang whose telephone number is (571) 272-4780. The examiner can normally be reached on Mon-Thu from 6:00AM to 6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on (571) 272-1990. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Tu Ba Hoang  
Primary Examiner  
Art Unit 2832

May 22, 2006